MARINE RECREATIONAL INFORMATION PROGRAM

FY   Project Plan

Pilot Project, Phase II: Survey-Wide Implementation of Electronic Logbook Reporting on Headboats Operating in the U. S. South Atlantic and Gulf of Mexico.

Created on

Rob Andrews

1. Overview

1.1. Background

In 2009 the MRIP Operations Team funded Phase I of a pilot project to develop and implement an electronic logbook reporting system on a small subset of headboats in the U. S. South Atlantic (SA). Electronic data collected in this project was compared with the conventional paper logbook submissions from participating captains. The year-long pilot project was successful based on the following statistics: 1) electronic logbooks were reported for 93% of trips documented by port agents; 2) species reporting accuracy on logbooks was 74% for species in the SAFMC Snapper-Grouper FMP when compared with species sampled by dockside samplers; 3) the average time for electronic logbook data to be available was 20 days, compared with current paper logbook requirements of once-monthly submission; 4) and the initial one-time cost of survey-wide implementation of electronic logbooks is estimated to be $96,000, with subsequent yearly maintenance costs of $36,000, compared with continuing annual costs at least $81,000 for paper logbook reporting, resulting in a savings of $165,000 over the first five years of electronic reporting.

The data reporting methodology used in the one year pilot project involved the software developer providing proprietary software to each participant to install on their personally owned computer. Participants then filled out an electronic form and saved it to their computer for later e-mailing to the software contractor, who managed the data. Participants also filled out a paper logbook form for the same trip, and those were collected, as per usual procedures, by port samplers in the course of their normal sampling duties.

1.2. Project Description

This project will expand electronic logbook reporting to the entire universe of headboats currently reporting paper logbooks to the Southeast Region Headboat Survey (SHRS). There are currently approximately 160 vessels reporting to the SRHS in the SA and Gulf of Mexico (GOM). Transitioning from a pilot project involving only seven vessels to the full complement of 160 vessels will require a significant increase in outreach, education and training from the SRHS staff to the vessel owners. Much of this will be provided by individual SRHS port samplers and the software developer, with additional help provided by senior SRHS staff at the Beaufort Laboratory when necessary.

General recommendations resulting from the one-year pilot project include: 1) survey wide implementation of electronic logbook reporting in the SEUS; 2) development of an internet-based software portal for electronic reporting, as opposed to installation of proprietary software forms on individuals computers; 3) utilize SRHS staff expertise to provide local training and QA/QC to vessel owners to improve data quality; and 4) review/revise/implement regulatory infrastructure for transitioning to electronic reporting, with emphasis on compliance issues (codify within the

Code of Federal Regulations). We propose in this project to implement all of these recommendations.

Additional technical recommendations provided by vessel owners, SRHS staff, software developers and stock assessment scientists include adding specific data elements helpful to the stock assessment process to the logbook form: fishing depth, more precise locations, identification of primary target species. Other good recommendations include adding visual aids helpful to participants when entering data, such as maps of fishing areas or a visual catalogue of fish species photos for help with species identification.

We will offer all headboat owners the opportunity to either participate in our expanded electronic logbook reporting project or to continue to submit paper logbooks. Either one of these options will satisfy the federal statute requiring for-hire permit holders to report in a timely manner to the SEFSC. We will accomplish familiarization training, e-logbook set-up, and troubleshooting/technical help via the SRHS network of port samplers and the software contractor. The reporting will be via a web-based portal which the software contractor will develop, test and implement in the first 60 days of the project, with an estimated roll-out date of June 1, 2012. Senior SRHS staff at the Beaufort Laboratory will work with NMFS Southeast Regional Office (SERO) legal staff to ensure that the proper legal framework exists or can be put in place to ensure that electronic logbook reporting becomes the accepted procedure, as well as to ensure that timely and complete reporting is linked to the ability to possess and keep a for-hire permit in the applicable fisheries.

1.3. Objectives

1. Implement survey-wide electronic logbook reporting in the SRHS, using local port samplers and the software contractor for start-up technical help with website access, data required, etc.
2. Develop and implement a web-based portal for data entry, replacing the personal computer-based proprietary software used in the pilot project. We anticipate this may allow some owners without computers to participate via secure login web access.
3. Beaufort SRHS staff will provide data QA/QC via timely checks of submitted data, helping to clear up any confusion with data elements that any of the participants may be having.
4. Ensure that electronic logbook survey is compatible with current Code of Federal Regulations governing mandatory reporting in the SRHS.
5. Development by the software contractor of additional features of the web-based data form useful to users and scientists (e.g., depth, location, target species, on-demand fish identification catalogue, etc.)

1.4. References

N/A

2. Methodology

2.1. Methodology

This project will test software modifications to the previously developed version of the electronic headboat logbook. These modifications include: 1) Internet-based portal to submit headboat data; (2) Visual aids for electronic logbook applications (e.g., maps of fishing area, species identification aids); (3) Inclusion of data fields for fishing depth, more precise location data, and a field declaring target species; (4) "Smart menus" which track users' past entries to adaptively simplify future data entry; and 5) A query function allowing effort and catch to be summarized according to a user's needs.

SRHS staff will contact owners\vessel operators to initiate transition from paper to electronic reporting. Initial contact may be by certified mail. Each owner operator responsible for reporting to the SRHS will be contacted to identify any issues related to transmitting electronic reports via the Internet . Technical support from the software developer will be provided to facilitate Internet access, logbook training, and application of the new system. Support will also be provided by SRHS staff and port agents on demand. Paper logbooks will not be required of vessels participating in the electronic reporting survey. Any owner who does not want to participate in electronic reporting will be allowed to continue to submit paper logbook forms, but we will strongly encourage all headboat fishery participants to take part in the electronic reporting project. One incentive we will emphasize to potential participants is the query/summary application we will develop, which will allow individual owners to query the database for summary reports of their own vessel's fishing activity (anglers carried, fish species numbers and weight landed and discarded).

Beaufort SRHS staff will provide QA/QC of electronic logbook data as it comes in to the lab from the software contractor at regular intervals, and any problems identified will be referred to that participant's port agent for contact and consultation to clear up any misunderstandings about procedures. Normal data quality assurance procedures will be employed to ensure the data is error-free. Paper logbooks will continue to be forwarded to key entry contractors outside this project for entry into the database. We anticipate this to be a fractional part of overall catch record submissions going forward.

Year end estimates of catch and effort will be prepared as usual, and we will document any time savings realized in the estimation procedure attributable to the increased electronic reporting. We anticipate that a savings of two to two and a half months in the estimation procedure could result as a function of electronic real-time reporting.

2.2. Regions

2.3. Geographic Coverage

Southeast U. S through the Gulf of Mexico (North Carolina through Texas).

2.4. Temporal Coverage

May 1, 2012 – Dec 31, 2013

2.5. Frequency

Daily Reporting

2.6. Unit of Analysis

Vessel-trip

2.7. Collection Mode

Online Logbook report

3. Communications Plan

3.1. Internal

Weekly phone calls with field samplers; emails as necessary.
Phone calls or emails with other critical team members (software developer) as necessary.

3.2. External

Monthly reports to the MRIP Operations Team.

4. Assumptions and Constraints

4.1. New Data

Yes

4.2. Track Costs

4.3. Funding Vehicle

MRIP Operations Team

4.4. Data Resources

Southeast Region Headboat Survey

4.5. Other Resources

The electronic logbook modifications and data elements included in the logbook for this project will require input from NOAA Fisheries Service stock assessment analysts and one private software consultant. We will consult with both entities to ensure the logbook is not only collecting the desired data, but that it is as user friendly as possible.

4.6. Regulations

Headboat owners are currently required to submit logbooks if selected by the Southeast Fisheries Science Center Director. The Director has currently selected all headboats to report. We are not asking for an additional report, but the same report in a different format. The regulation to report is still in place. We hope the ease of electronic reporting will encourage many permit holders to select the new method in place of paper logbooks. Non-reporting will continue to be monitored and reported to the SERO Permits office for consideration of non-renewal of permits for offenders. However, we do not anticipate any major problems in this regard.

4.7. Other

N/A

5. Risk

5.1. Project Risk

Table 1: Project Risk

Risk Description	Risk Impact	Risk Probability	Risk Mitigation Approach

6. Final Deliverables

6.1. Additional Reports

Mid term report assessing progress on logbook e-reporting system, with suggested improvements.

6.2. New Data Sets

6.3. New Systems

Updated electronic logbook reporting system allowing much faster year end estimates of catch/effort.

7. Project Leadership

7.1. Project Leader and Members

Table 2: Project Members

Project Role	Name	Organization	Title

8. Project Estimates

8.1. Project Schedule

Table 3: Project Schedule - Major Tasks and Milestones

#	Schedule Description	Planned Start	Planned Finish	Prerequisites	Milestones

8.2. Cost Estimates

Table 4: Cost Estimates

Project Need	Cost Description	Date Needed	Estimated Cost
TOTAL			$0.00